

IONEWS

Vol. VI.

RIO DE JANEIRO, APRIL 5711 1879

No. 7

WILLIAM MILNOR ROBERTS,

ing News, Jan. 11, 1879

This eminent engineer, having been in rited by the Government of Brazil to take charge of the improvement of the rivers of charge of the improvement of the rivers of that country, sailed on Saturday, January, with his family, for Rio, to assume the duties of his important office.

His recent election to the presidency of the Its recent election to the presidency of the American Solely of Civil Engineers, together with his departure for a prolonged absence, has seemed to us involvening a future sortening to resenting the readers of Engineering News with a bnef sketch of a long and ring Area with a bnet sketco or a rong and eminently successful professional career as career which embraces the history of the public works of this country, and which has been personally conjected with the inception and execution of many of the most important

w. M. Roberts, of Quaker descent, was born in the city, of Philadelphia, Fels. 12, 1840. He received his education in the best private schools of that city, completing two mathematical terms under the eminent math-ematician, Joseph Roberts. He was taught architectural drawing (in the first school estab-lished by the Franklin Institute), by John Haviland, the distinguished architect. During the first years of his engineering life, he at-tended French and mathematical schools during the winter months, paying therefor out of his moderate summer earnings. It was owing to his aptitude for figures and investion that his fathers's friend, Samuel Mifflin, then President of the Union Canal Mittin; then President of the Union Canal Company of Pennsylvania, urged his selection of the engineering profession when in his sixteenth year. He received his first appointment from Canvass White, the celebrated canal angineer, in the spring of 1845, as a chainman, on the Union canal, in the party of which Mr. Sylvester Welch was the head. At the age of eighteen be was promoted by Mr. White to the charge of the most difficult division of the Lehigh canal, extending from Mauch Chunk down, sixteen miles. In 1829 his description of the Lehigh canal was pub-lished in "Hazard's Register."

We learn from Mr. Roberts that, in the early days of engineering in the United States assistant engineers in charge of divisions were obliged to do all the draughting for their respective divisions (at night, and during miny days), lay out and superintend all the works, and survey and map the lines themselves, the luxury of office draughtsmen being very sparingly allowed for some years. Railroad en-gineering began, in a crude way, in the United States in 1826, at the Quincy Granite Quarry. It was at first a tramway, of three of four miles in length for the transportation of stone from the quarry to the water. The first regular milroad of consequence in the United States was the Mauch Chunk gravity road, nine miles in length, between the summit of ad Top mountain and the head of the inclined plane at Mauch Chunk, for the trans-portation of anthracite coal and passengers: The first passenger car in the United States was put upon the Mauch Chunk railroad, in the early summer of 1827, and Mr. Roberts was one of the passengers on its first trip down the road. So that he saw the inception of the railroad system of our country in his youth, and he has grown with its growth. In 1835-36 he planned and built the first combined railroad and common road bridge. with the railroad on top, and the wagon road-way below. It crossed the Susquehanna river at Harrisburg. Some years afterward the su-perstructure was destroyed by fire, and a-third superstructure, which is still in use, was built upon the same piers.

In 1830, Mr. Roberts was appointed Resident Engineer in charge of the Union Railroad road and Union Canal leeder, Pennsylvania; in 1831, '32, '33, and '34, he was Senior, principal assistant engineer on the Allegheny Portage railroad, having also charge of repairs (after the great-flood of 1832) of the Western Division of the Pennsylvania State canal — from Johnstown to Pittsburgh, and the running and management of the inclined planes. In 1835, at the age of 26, he received his first appointment as a chlef engineer, being called to fill that position on the Harrisburg & Lancaster spilroad, for which he was obliged to decline the same office on the Upper Lehigh Navigation; during the same year he accepted the chief engineership of the Cumberland Valley Ralitoda, which he held during 1836 and a part of 4837; being also employed in 1836 to make a survey and report on the Harrisburg water-power and water-works.

建筑

Since then he has filled the office of Chief Engineer of the following works: Ins 1837, 38, 39, 40 and 41, of the Improvement of the Monongalela river; the construction of the Pennsylvania State canal; the Eric canal, and the Idappovement of the Ohio river to Lake Eric; in 1841-42, he was a contractor on the Welland canal enlargecontractor on the Welland canal enlarge-ment; in 1843-44 he was Chief Engineer for line Eric Canal Company; in 1845-46-47, he was Chief Engineer and Agent for Trustees of the Sandy and Beaver Canal Company of Ohio; in 1847, he declined the Chief En-gineership of the Ohio & Pennsylvania rail-road; in 1848, he was appointed by name by the Legislature of Pennsylvania to make a survey to avoid if possible the Philadelphia Schuylkill Inclined Plane; in 1849, he declined the appointment of-Chief Engineer for the first proposed South America railroad to take that of the Bellefontaine & Indiana railroad of Ohio, which office he held till 1851, during which year he also acted as Consulting Engineer for the Pittsburgh & Steubenville railroad; in 1852-53-54, he was Chief Engineer of the Allegheny Valle railroad; Consulting Engineer for the Atlan tic & Mississippl railroad; Contractor for the whole of the Iron Mountain railrod of the whose of the 'Iron Mountain railrod of Missouri; and Chairman of a commission of three appointed by the Pennsylvania Legislature, to examine and report upon routes, etc., for avoiding the old Allegheny Portage Railroad inclined planes, and was in 1853 obliged to decline the Chief Engineership of the Virginia Central railroad on account of his other engagements. In 1855-56-57, Mr. Roberts was contractor for the entire Keb-kuk, Des Moines & Minnesota milroad, Consulting Engineer for the Pittsburgh & Erie and Terre Haute, Vandalia & St. Louis railroads, and Chief Engineer of the Keokuk Mt. Pleasant & Muscatine railroad.

In December, 1857, Mr. Roberts 8 to Brazil to examine, the route of the Dom Pedro Segundo railroad, with a view to bidding for its construction. In 1858, as senior partner of an American firm of confractors, he returned to the United States and concluded the formal contract to build the said road with the Brazilian Minister, Senhor Carvalho de Borges; returning to Brazil in the following year, he took active charge of the construction of the above railway, and remained to the completion of the conin 1864. During 1864-65, he devoted some, time to the examination of other railroads in Brazil, visiting also for examination of its public improvments, especially railroads, Uruguay and the Argentine Confederation, and returning in the fall of 1864 to the United States, after an absence of abou

After a couple of months of rest Mr. Roberts again took the field for the surveys o the Atlantic & Great Western railroad, which he completed in April, 1866, when appointed to make examinations and reports upon the proposed "Southwest Pacific," the "North Missouri" and the "Iron Mountain" railroads of Missouri, and of the Western Maryland railroad. In the same year, in was appointed by Edwin M. Stanton, Secretary of War, U. S. Civil Engineer-in-Charge of the "Ohio River Improvement," which office he held till 1870, when he resigned to accept the Chief Engineership of the Northern Pacific railroad. In 1868 and 1869; he filled the position of Associate Chief Engi-ncer of the great St. Louis Bridge, which he resigned also in 1870 for the same reason as above given. The Chief Engineership of the Northern Pacific railroad Mr. Roberts has held to his departure for Brazil and still holds, and as late as the present season con-ducted in person special surveys of the Cascade Mountains, on the Pacific Coast, for the company, and up to the day of leaving, was constantly in attendance at the office of the company to assist in letting the recent con-tract for building 100 miles of road west of Bismarck, an in arranging other business of

the company prior to his leaving the country

the company priog to his leaving, the country for his long absence:

While 'acting as Chief' Engineet for the Northern 'Pacific Railroad Company, Mr. Roberts in 1873, examined and reported upon the Marquette & Mackinaw railroad in the peninsula of Michigan, and also upon the Minneapolis & St. Louis railroad; in 1874, he made a report upon the New Pittsburgh water-works, and in 1875, he was one of a commission to examine and report upon of a commission to examine and report upon of a commission to examine and report upon the Philadelphia water supply. In 1874, also, he was appointed by the President of also, he was appointed by the President of the United States one of the Commission of Military and Civil Engineers to examine and report upon the best plan for improving the mouth of the Mississipin Rivel, and for this purpose he visited Europe with the commission, and after visiting the delia of the Mississipin on his geturn, reprincel to the Secretary of War. In 1876, as, Vice President of the Americau Society of Civil Engineers, he devoted a considerable portion of his time in the Americau Society of Civil Engineers, he devoted a considerable portion of his time in the interests of the profession of the Centennial Exhibition at Philadelphia, in 1877, he located the Nictaux & Atladic in ilroad in Nova Scotia, and upon his re um from Oregon, only a few months ag. he accepted the invitation of the Brazilia Government to take charge of the water—vs of the Empire; at a salary of \$20,000 per year, for three years, upon the duties of which office he has already distreat. At the recent survival most already entered. At the recent annual meet-ing of the American Society of Civil Engiing of the American Society of Tayl Engineers, in this city, Mr. Robots was elected President, and in leaving the United States for a temporary (as we trust) absolute in a foreign country, he carries with him the highest hopos that are, obtainable in his profession in this country. Mr. Roberts has flow, after him the profession in this country. Mr. Roberts has flow, after a very busy life, attained almost to the extreme age allotted to man, yet, as his associa-tes and friends, who meet him in the daily routine of business, or as the ruling spirit of society meetings and excursions can abundantly testify, his step is still of the firmest, and all his accurates the clearest, so that, unless some unforeseen accident befall him. Mr. Roberts has still the promise of many years of active labor in the highest fields of his profession before him.

We have thus briefly sketched, from such information as we could obtain, the profes-sional life of one of America's most talented civil engineers. We have no doubt, that in those busy years, a multitude of other engagements have been filled -- how carefully, ably and thoroughly, all the important trusts committed to his care have been discharged, is attested by the latest honors that have been added to his well-earned laurels.

We join with the thousands of others of the admirers of the successful engineer in wishing him and his family a safe voyage, and a successful completion of the important enterprise which has been committed to his

THE BANCO NACIONAL FAILURE

At a meeting held on the 1st instant further inquiry into the causes that led to the bankruptcy of the "Banco Nacional" for the purpose of arriving at a final decision as to whether the failure resulted merely from natural causes, or whether it should be attributed to fraud or culpable negligence on the part of the managers and directors, Counselor Araripe, after a few introductory remarks proceeded to lay before the meeting the following statement of the bank's operations which led to its bankruptcy being declared on 7th, 1878,

In order to place the state of the legal process cleanly before the meeting His Excelency indicated the causes under the following heads:

1st. The phases of the case.

2nd. The facts which require qualifica-

3rd, Whother the managers were culpably

4th. Who were the managers of the bank. Regarding the phases of the case His Excellency said the failure of the bank The declaration in question bears the signatures of the directors or managers, Them-isocles Petrocochino, and João Ferreira de Abreu; — the president of the board, Connsellor Cansansão de Sinimbii, having retired from the directory on January

His Excellency called to mind that on May 13, 1876, the managers of the bank petitioned and obtained a moraloria (extension of time for closing up affairs), the terms of which not having been fulfilled gave rise to the declaration of bankruptcy above mentioned—the petition being signed by Joao Lins Vieira Causungao ile. Sinimbii, Themistocles Petrocochino, and Manoel Teixeira do Valle.

Teixein do vane.

As to what facts left to the qualification of bankruptcy His Excellency said,
(A) that the bank on March 7th, 1875,
(occasion of the morutoria) was possessor
of bonds valued at 1,061,4408000, and held of bonds valued at 1,061,440\$000, and held as securities against advances, government bonds and shares of various companies anomating to Rs. 10, t53,0008000 as shown in the statement of auditors and in the balance sleet altached to the moratoria.

At the time of the declaration of balances are the statement of the declaration of the declaration

At the time of the declaration of bankruptey, June 7th, 1878, the bank possessed in shares of other bank's and companies Rs. 1,760,3605000 and held as sectify for advances about 3,00,00000 also in shares of various banks and companies in shares of various banks and companies as shown in their balance sheet

From this is manifest the large trausactions effected by the bank on the basis of public and private securities amounting to thousands of contos of reis while its realized capital was only Rs. 2,996,1005000, as was seen from the balance sheets, although the nominal capital was 10,000,000\$000, of which only the sum above
above mentioned had been paid in.

From the declarations made at differen periods by the directors it will be observed that the shares of the various companies dealt in and held by the bank suffered a depreciation of more than 50 per cent, of their nominal value, the greater part being, at the same time, unsalable and valueless as realizable security. From this resulted such losses and embarrassments to the bank as precluded them from meeting their obligations.

The bank having entered into liquidation during the moruloria suffered a loss of more than Rs. 36,000,000 on realizing the bonds held by them, and on realizing the securities (shares of various companies) deposited as guarantees by six of the bank's debtors, the hank suffered a further loss of Rs. 1,208,963\$ as shown by their Inlance sheets, statements of profit and loss, and by various documents of the case. These heavy losses, of themselves, absorbed nearly half the realized capital of the bank, without taking into consideration the further losses due to the depreciation of shares belonging to the hank or held as

The fiscal auditors expressly state in their report that the 'Banco Nacional' lent large sums to private parties, on stock securities, and, deposits having ceased, being obliged to realize on those securities, was forced to suspend payments and ask for the meridoria.

From this it will be seen that the same causes occasioned the petitions for moratoria, and for bankruptcy, id est losses arising from negotiations in bank and other stocks

(B) The indebtedness of the bank—more than 21,000,000\$ according to the last balance-sheet Dec. 31st., 1878, was more than the double of the capital whether realized (2,996, 100\$) or nominal (10,000,000\$)

(C) The bank after entering into hounds tion received from some of its creditor, the bank's own bills, or acceptances, constinuing thus a class of special creditors who were thus paid in full (as shown by the rious accounts closed by this method) while the remaining creditors of the bank, who were not at the same time debtors to the bank or who did not buy the bank's acceptances (already greatly depreciated) with which to meet their liabilities to the bank, will receive only the amount determined by Excellency and the failure of the bank mass occasioned by the petition of one of the creditors on June 6th, 1878, and by another on the following day, leading to the declaration of bankrupery issued by the managers on the 7th, of the same month.

Rs. 10,0005000, for instance, to the bank in its own acceptances purchased in the managers.

- L . () :

The state of the s

ket at less than half that amount -while another creditor of the bank of Rs. 10,0005000 who had not succeeded in making the same operation, would finally receive at most one or two contos of reis from the liquidation, without taking into consideration loss of interest, etc.

For the further enlight ament of the Tribunal His Excellency laid before them the following list of the so-called special creditors, or crediter-developes:

Luiz A. Tassara de Padro....

	Tania . L. Tuyskin de Tarini,	1.111200
	Antonio Ferreira Butler	35.802,000
	Maximiano Eggreira Borgos	41.6
	Coellio & Irmaos	47,1518000
	José Gonçalves Pereira	113,3015000
	José Navier Ferreira.	2,6(65000
	Lata Tupper	21,5855000
	Jeronymo Moreita.	10,4815000
	F. H. Tress	30.1/45000
	Bernardo Camary	23.3775000
	C D'Ostin	12.0fiy5000
	Theodoro L. Ferreira.	9.3: 95000
	Ataliba Gontensoro	2.0235000
	Santos Bastos & Irmãos	20,361500
	Eduardo Tavares	30.34250
	Joaquim Rocha Leão,	57,7535000
	Antonio José da Silva	7,7399000
	Balthazar de Carvalho,	10,4025000
	Ednardo Braga	11,0705000
	Joaquím Pereira de Faria	50, 2035000
	Joaquim Ribeiro Gomes	5,6365000
	Domingos Moitinho	121,6358000
	Vianna Drummond	58,091 \$000
	Temistocles Petrocochino	108,257,5000
	Miranda Azevedo & C	(1,400,5000
	Dr. Souza Carvalho	42,0905000
	Calogeras & Irmão	\$2,0805000
	Antonio Joaquim Coellin	1,4008000
	Comp. F. C. de Porto- \legre	92,9895000
	Silva Caminha	8,6975000
	Gustavo Joppert	4.5585000
	Mello Barreto	
	Companhia Architectonica	12,4945000
	Companie de S. Paul	23,3805000
	Companhia de S. Paulo	33.317 9000
ŝ	Tilese torner dien money -	04.72

1,244,000\$, to the prejudice of those who were not at the same time delitors.

(D) In the various halance, sheets that served as a base for the moratoria, and alici-wards in those presented in the course of the liquidation, the securities held by the bank re entered at their nominal value

In the halance sheets of the lianistance the bank presents available assets to the amount of 18,915,075% and investments to an equal amount, but in reality it is seen that 7,003.900s were lacking to complete the canital stock.

It is also seen that, calculating the depreciation of the securities held by the bank as 50 " only, there was a depreciation of more than 2,000,000s from the nominal value which added to the 7,003 900\$ gives a depreciation of more than 9,000,000\$ at the time of failure so that, instead of more than 18,000,0004 of available assets, there was in reality less than 9,000,000\$ not including bad debts and the depreciation of other val-Thus the balances of the bank presented the institution as solvent when in reality it was not, and depositors confiding in the values given in the balance sheets continued to make their deposits

The following are the quotations of various

stocks on the 30th, of September,	18-4
Companhia Biazileira de Vave-	
grado	1955000
Companhia Panlista (notiproted)	5
Transportes Maritimos (not	
-gnote h	5
Carris F. Nitheroliyense	4 5
Carus 1. M intevides (not	
quaeit.	~
Carris I Porto-Alegrens	25.
Cams F. S. Panio (nor quoted)	
Carris F. do Maranhão	2 5 -
Carris F. de Pernanibuco (not	
quoted)	
Companhia Macalié e Campos,	455 1
Brazil Industrial	\$1.50
Companha Architectonica (not-	
quored)	~
Docas de Pedro II	; -
Banco do Brazil	20250
Banco Predial	115500
Banque Brésilienne-Fiançaise	
Diot quote h	

plain the nature of criminal responsibility as bearing more directly upon the subject under discussion, id ist that of the responsibility of managers or directors of joint stock companies, and then observed that the board of di-rectors of the "Binco Nacional" commenced their operations on February 15th., 1872, the directors at that time being Visconde de Prados, Themistoeles Petrocochino and Manoel Teixrira de Valle. On October 13th noel leavata de Valle. On October 13th.
1574, the Visconde de Frados retired from
the heard. Counselor Cansansto de Simindo was elected to the presidency of
the board on February 18th., 1876, on the
retiring of Manoel Telxeim do Valle. João Teixein de Abren was elected to the vacant seat at the board. Also that Agostinho Maria Corréa de Sá, having been elected on March 10th., 1879, in substitution of Them-istoeles Petrocochino, tendered his resig-nation on the 14th of June following without however having actually taken part in the management of the bank, upon which Themistocles Petrococlimo was re-elected director. Also that on January 5th., 1878, Coun-sclor Cansansão de Sinimbií retired from the presidency of the board, the management of the bank devolving from that date upon the two remaining directors, Themistocles Petrococcino and João Teixeira de Abreu. His Excellency in concluding his report and explination of the legal process to this point, submitted them to the appreciation of

BANCO NACIONAL FAILURE.

Comments of the Press.

In relation to the case of the "Banco Nacional" and cathe part which Counselor Sininhá too' in its administration, the leading journals of Rio de Janeiro, on the 3rd inst., comme ded as follows.

The Cruzeiro (...dependent) says :

Day before y wday judgment was rendered in the till hal of the Relacio which to a certain exit to startled public opinion. In it was invited the name of a minister of state. The cas had been a long time un-der discussion;" [ditical passions had em-

Nothing, however, impedes our writing a few words on the occurrence in order to recuft, as far as may be possible, impressions that are liable to be unjust.

This propensity for scandal which seems to rejoice even with the difficulties that a fortuitous event may produce in public affairs is sickening and much to be lamented.

The minister involved in the case took part for some time in the administration of a banking establishment. Very possibly, during his administration, irregularities oc-curred. The confidence that we owe to the tribunals of the country oblige us to admithat the documents present the bases neces-sary for the institution of a criminal process, for it must not be forgotten that we are treating here of a simple indictment.

No one can, however, for a moment suppose that the character, the probity of the worthy President of the Council can be ever slightly touched by such a proceeding.

An error in the administration of a banking establishment may occur; transactions may be effected that escape the solicitude of a man but little accustomed, if not entirely a stranger, to such business; the idea of a crime, of a speculation is absolutely inad-missable before the tribunal of public opin-ion. Sr. Sinimbi has fulfilled a long caneer without his name having ever become a sport even amongst his enemies.

Foreign to political partialities it is our duty to bear this disinterested and impartial testi-mony of one who merited the confidence of the chief of the state and of the country and who is now at the head of the executive power.

Still farther, the national pride and credit require this.

Despicable indeed must be the character that would attenue to obscure the reputation of men who rep esent the most distinguished part in the country; and once that such a precedent is established of putting the chief of the cabinet at the mercy of an ordinary crimmal proceeding, with the general tendency to abuse everything, with the desire so generally observed in certain persons to make everything appear mean, in a short

His Excellency then proceeded to extime government will be no longer possible and men can no longer be found to accept positions which from their very nature attract such painful aggressions. France has just given a grand example of political common accept.

The state of the s

of political common sense in not instituting eedings against the cabinet of May 16.

It is taue that the case in question wa the greatest of political crimes, but for thi wey reason its importance was much greater. France ran the greatest risk of falling again into the regime of a reactionary government which, retarding the realization of her aspirations, would most probably have plunged her again into revolution.

France comprehended that she needed above all things to proceed in her internal re-forms, in the plan of her immense material improvements, and that she should not allow herself to be turned aside from the grand work of national restoration to satisfy petty passions or even to punish crimes which, however grave they may have been are always small indeed in comparison with the most important interests of a great people.

It is not with miserable chicaners, with individual retaliations originating many times shall succeed in reorganizing this country, of whose bad condition we all complain.

He who is sineere in the desire of pro-

moting the public good instead of putting embarrassments in the way of the adminis tration should remove them

The more sineerely we abstain from creating embarrassments or discrediting the administration, the more strictly we may call it to account for its use of the power entrust-

The Gasetta de Noticias (independent) says, in effect :

We have no express law determining the responsibility of the managers of joint stock companies. They should, therefore, be considered as agents of the stock holders who from year to year assume the responsibility of their acts, in approving their accounts and in almost always, praising their services.

The fiscal committees of such committees of in general composed of intime

the managers, have "

we must respect the secret of justice. in such a failure as that of the "Banco Nacional," it should extend to the fiscal committee that examined and the shareholders that approved the acts of the managers.

or the state of the state of

The failure of a joint stock company can not be legally considered fraudulent unless the shareholders as well as their agents are to be held responsible.

The "Reporter" (independent) after briefly noticing the history of the case says :

"The memorial contains the most convincing proofs of the moral degredation to which the most sacred things of the country have descended. "

'The name of the President of the Coun cil and Minister of Agriculture and of Foreign Affairs did not come out untouched as was anch to be desired for the good of our credit.

"During his administration of the "Baned Nacional' facts occurred which while they do not render certain the intentions with which he sanctioned them, show that His Excellency was not sufficiently careful in lending his name without examination to illicit acts.

h The honor of this country is worth more than a caprice and the noble president of the council bowing to the facts, should to-day render his country the most signal service it can require at his hands, retiring with his collegues from positions in which the country considers them to be without prestige.

The Fornal do Commercio has nothing to say editorially on the subject.

The customs policy of Germany, as out lined by the Emperor William in a recent speech, is as follows: "Our commerce has a right to claim that protection which legis-lation regarding customs taxes can afford, and which is affortled, perhaps beyond what is necessary, in countries with which we trade. My duty is to preserve a German market for articles of home production. We should revert to the well-tried principles which we, in our commercial policy since 1865, have abandoned."

THE RIO NEWS,

eve of diparture of the American packet French packet of the 15th., and the Royal Mail packet of the 24th, of the month, summary of news and a review of Brazilian arrivals and departures of foreign vessels, the ort and spice current of the market, a table of int, and all other information necessary to a

TERMS:

cripides and advertisements received at the office.

o Mando, 47 Rua Primeiro de Março.

LICATION OFFICE:—81 Rua Sete de Setembro.

RIO DE JANEIRO, April 5th., 1879.

THE RIO NEWS will be furnished to the sub-scribers of "The British, and American Mail," which it succeeds, until the terms of their sub-veristions shall have expired.

THERE is a time-honored custom among newspaper makers and newspapers readers which requires that the opening and closing of a journal's life, its purposes and results, shall be accorded the honors of a public re-ception. The Rio News seeks no such honor, it comes into existence in obedience to a recognized necessity; when that neces sity no longer exists, should that time ever come, it will discontinue publication. In the meantime, its patrons may feel assured that its work will be done impersonally and conscientiously on the part of its conductors, and with all the thoroughness which its

RECENT news from Pari give discouraging reports of the eastanha crop of this year on the Caruá and Brombetas. There is a marked failure in the layvest. The beacado crop, however, is reported to be very bountiful.

THE SUBMICIPLES OF CHARGE BAR REEL the free records surreaded the Classic diames I manger, in abeliance to the de-cise of the Posidant and United State no requirement as least or chibration

AL'on a clowhere r hall account of the Lanco Noon mell case as presented before the Primara as Relação by Councier Araripe, and the comments of the daily press of this city noon [1]. The case is an unusual one as it involves political as well as civil in-

one as a involves pontical as well as civil in-terests. Though supposed to have been tak-en in secret, it is well known that the judges, by a vote of two to one, have adjudged the failure culpable.

RECENT rains in Ceará have given renewed hope of an early termination in great part, of the rigors of drouth and fam ine. On the 7th ultimo the president of that province issued a circular to the relief agencies calling their attention to the great neces sity of resuming work, especially in the planting of cereals and legumes. He state that since January, corn, beans and rice, for seed, have been forwarded to nearly all the districts, and directs that in those where seed has not been received, it shall be purchased has not been received, it stain be purchased at a reasonable price and distributed among the poor people. The cultivation of cotton is also recommended and, to this end, cutton seeds will be distributed gratuitously.

According to the New York correspond ent of the Fornal do Commercio, this city is about to be favored with a visit from ar excursion party of prominent American mer-chants. The organizing spirit of the move-ment is a Mr. Bowen, of Cbicago, the same gentleman who organized a similar junket-ing expedition to the City of Mexico a few months since. The excursion will undoubttedly be a pleasant one. Calm seas, comforttravelling accommodations, table, a Brazilian winter — the pleasanter part of our year - and an endless succession of receptions and attentions, all will conspir to render the excursion an agreeable one. We have not learned whether the voyagers will remain here more than the week days which the American steamer spends in port, but it is probable that they will be able in that time, to see and admire all the beau tiful scenery of this vicinity, and to make many new acquaintances. They will cer-tainly carry back with them many pleasant recollections of their fortnight in the tropics.

THE Regenerator of Campos is congratu-lating the sugar interest of that region on the presence in the district of the "illustrious and distinguished engineer." Mr. Sellier, who promises to increase the production of who promises to increase the production of sugar cane without augmenting the expense, by the simple process of extracting as much sap from the second-growth "suckers" as from the first crop of same. If Illustrious and distinguished engineers" are rich in theory but poor indeed in pratice, when they enter the field agricultural. Mr. Sellier, it is sald, has "saudied" the cultivation of sugar-cane for many years in the Antilles. It would be more to the point if he had "worked" a plantation with profit and advantage; if he had been less "illustrious" and more of a practical hard- handed farmer.

CONTRARY to the general impression the American House of Representatives has refused to sanction the Senate's amendment to Iused to sanction the Senate's amendment to the Postoffice Appropriation bill, granting a subsidy to the United States and Brazil steamship line. It was sipposed that the general recognition of the need of such a service would lead to the speedy appropriation of the money required, but in this research. Rocch and his friends have been grievally disappointed. We understand that the Brazilian government will perform its part of the contract regardless of the course of the American government, but, in accordance with a special clause of the Berne posta treaty, it will collect from the latter the rates on postal matter accorded to it in such

Among the amendments to the estimate of the Minister of Agriculture for the ensu-ing year as passed by the Chamber of De-puties, we notice that of the reduction of the appropriations for the National Museum from 60,000\$ to 54,000\$. It is wew known among intelligent men, especially those whose high agard for the material interest and progress of Brazil is real rather than as feeted, that the original estimates have been totally inadequate in former year and are re so now in view of the increased

differents of the museum that to tals institution is committed of Jeveloping science as Brazil and of we of excepting science or machine world; that only through it can the aspirations of the only through it can the aspirations of the daysilian room to scientific instruction, be affected upon the control of the control

exact training, which can best direct the ma-terial development of Brazil. That this country sorely needs a large body of the oughly trained scientific men is one of the most cyident facts of the day, and to me this requirement the national legislature cuts down the appropriations and refuses needed assistance to worthy scientific institutions. It can afford to procure colonists at an enormous expense and locate them on worth less lands; it can allow its citizens to organ-ize costly explorations for gold and coal mines in localities where a trained man would determine their nonexistence, in pay ing quantities, in a moment; it can survey and resurvey land and water routes into u nliabited and uninhabitable territory and can import men to do this work. other sense this nawise economy will prov a severe blow to the museum. During the the extinct Geological Commission a collection which in scientific value is not inferior to those of tha tinstitution. The classification and care of this val uable collection is now a charge upon the few men now connected with the museum few men now connected with the museum and the government expects them to do it on a decreased appropriation. If this is to be taken as a sample of the appreciation of science in Brazil, then surely M. Jobert had good reasons for the strictures which indignantly repelled only a few days since.

ECONOMIC USES OF THE BANANA.

In addition to its already well-known food qualities, it has been recently demonstrated that the banana possesses others of inestimable value. An excellent and highly nutritive flour can be made from the green fruit, which, it is said, makes a superior quality or bread. It is also claimed that both the flour and bread are specially adapted for use on long sea voyages, as they preserve their freshness and are not liable to the attacks of insects. The flom is made by drying and pulvernzing the fruit, gathered just before reaching maturity. It is said to be best when

no instruments of Iron or steel are used in cutting or drying the fruit, as both the color and tasts are injured by contact with this metal. Experiments have also showed that the ripened fruit contains seven per cent of sugar and is highly valuable in the manu-facture of rum. The French academician,

Boussingault, says that one hundred kilo-grammes of bananas will make nine litres of alcohol of ninety-six degrees proof.

Should these experimental results prove as practicable and successful as is now claimed for them, their value of this country will be inestimable. The banana grows throughout the greater part of Brazil with little or no care, and produces abundantly. If it can be made into a substitute even in a slight degree, for the expensive, imported when as a substitute for the national farinha a maintified which lacks good keeping qualities and is made by very rude and troublesome processes, it will cerainly be productive of incalculable benefits. Add to this the possi-bility of its becoming an article of export, and bling of a become apparent. Whether it will be fairly and fully tested is yet an open question

There is yet another economic feature connected with it which deserves the careful attention of Brazilian planters—its value as a conserver of moisture. Boussingault claims that it keeps the soil moist, even in those countries where there are annually-recurring periods of drouth. In Venezuela the coffee planters are already utilizing this property of the banana trees by planting them between the rows of coffee trees. This experiment is said to have produced decidedly beneficial results. In this respect the coffee planters of Brazil will do well to give the banana an early and thorough trial. Almost every season some of the coffee districts suffer from heat and drouth, and a preventive so simple and so inexpensive certainly deserves their

immediate attention.

Further than this, if it be true that its general culture, tends to modify the effects o heat and drouth by keeping the earth moist and fertile, while at the same time furnishing a highly nutritious food, its immediate dis-tribution and cultivation in the drouth-afflict-ed provinces of the North, becomes a question of vital importance. That the drouth will return again and again no one doubts; if true entiring, especially that of the banans for which so much is claimed, will mitigate its severities, and prevent distressing famines, then the bermaning can not be made too soon It certainly has a more immediate and vital importance than the proposed culture of cotton:

PATENTS IN BRAZIL.

The following brief compendium of the law and practice governing the matter of tak-ing out privileges of invention and intro-duction, will prove of interest to our readers abroad.

Regarding the cost of taking out a privilege, very little can be said. It the inventor be "native and to the manor born," it is comparatively moderate, as he avoids the cost of powers of attorney, consul's certificate, recognition of consul's certificate and signature by the State department, translation of power of attorney, specifications, etc., by the official translator, and is only called upon to pay the usual revenue stamps and fees for transcribing—say about one hundred milreis, To the toreign patentee the cost may be anywhere from one hundred to five hundred milreis, depending upon the length of specification and description, and fee of his at-

The constitution of Brazil, § VIII. art. XXVI., recognizes and guarantees to inventors the rights of roperty in inventions, and provides for their protection by law.

The law of August 28, 1850, modelled on the French law of 1810, was effected in accordance with this provision of the confutution.

By the law of 1850 are classified as inventions:

181.—The covery of a new Industry.

2d.—Improvement of a known industry.

2d.—They included of a known industry.

2d.—Improvement privileged concessions subject to the approval of the legislative power.

11.—The cataling principle of the law of 1830 is to the effect that government assumes no responsibility, but great privileges irrespective of originality, or untility; consequently previous examination and compality, hence the vital elements of the invention or process may be kept secret until the expiration of the privilege.

III.—The operation of a known in a known in the original process may be kept secret until the expiration of the privilege.

III.—The operation of a known in a known in the original process may be kept secret until the expiration of the privilege.

III.—The operation of a known in the properties of the properties.

IV.—The "Sociedade Auxiliadora da Industria Viviles state, where they are referred to the appropriate boundities to report upon.

IV.—The "Sociedade Auxiliadora da Industria Viviles state, where they are referred to the appropriate boundities to report upon.

en al de la company de la comp

Nacional" is also consulted by the Government tegarding privileges of introduction.

V.—This examination simply guarantees that the invention is not prohibited by the law, or prejudent the invention of the law or prohibited by the law, or prejudence. the invention is not prohibited by the law, or projectifical in the constitution, and implies a certain-degree of probability that the invention has not been previously known in the Empire.

VI.—The Covernment genus privileges of intro duction only upon being fully convinced of the davantages to be derived.

VII.—No privilege, of invention, improvement or introduction are consected without a consultation with the attoriety of the crown and, including with the attoriety of the crown and, including the

sny.

VIII.—The title of a patent is a document (Carta Insperiar) signed by the Emperor, and countersigned by the Minister of Agriculture, Commerce and Pablic Works, The latter takes conjuncted of all questions relating to this subject.

relating to this student.

IX.—The Garat Invertal limits the term of the privilege, and flessy whatever other conditions circumstances may require.

X.—It is membered on the government to fix a term of not less that five years, nor more than twenty years, and the duration of a privilege. These limits are established by live.

XIA.—This pattent or executive decree is not effective unit approved by a vote of the national legicities.

XII Application for paterts must consist of the

XII.—Application for patents must coasset of the following documents.

1st.—Petition to the Emperor requesting the grant of a patent, stating clearly the object of the invention and the term of years it is intended to cover.

2d.—Declaration of the petitioner that he is the invention.

invento

inventor.

3.1—Document proving that the petitioner has deposited in the public archives models; designs or plans and specifications.

XIII.—Foreign patentiess may present their applications by a day empowered attorney.

XIV.—The patent being conceded, the patentee was sell or transfer all or, a part of his right under the laws governing the sale or transfer of other property.

It will be seen that the way of the appli-cant is not very clearly defined, nor are his rights very rigidly guarded. The clause making legislative conseit a sine qua non is practically a bar to the granting of any important privileges of invention, and the ab-sence of "patent" legislation, or "patent" laws to enforce judgment against infringers, makes the holding of a privilege rather a dubious posse

COFFEE PRODUCTION

Messis. Editors :- It will doubless interes Activity, Editors:—It will doubless interess some of your readers to learn something of the cost of growing coffee in this country, and having on three several occasions, viz: in 1850; 1860, and 1875, endeavored to in-form myself upon this subject, I arrived at the following conclusions:

In 1850, that to obtain a return of 6 per cent; from the capital employed, required a sale price in this market of 3\$800 per arroba; that to reach the same result in 1860 it required 6\$600, while 7\$500 were required in

These estimates were based upon an aver ness esumates were based upon an average yield, and would necessarily vary with the extent of the crop—diminishing with a large crop, and increasing with a small one. An average crop may be considered about these millions of here three millions of bags, weighing 60 kilos

While in 1850 my investigations led me to the conclusion that 3\$800 per arroba was necessary to give the planter 6 per cent. upon his capital, it was asserted by one of our important planters that he could sell coffee at 25000 per arroba, and make a profit of Soc réis per arroba. He however based his calculation simply upon the actual cash outlay in producing an arroba of coffee which in his case was 1\$200 per arroba, and he conse quently maintained that 25000 per arroba gave him a profit of 800 réis on each arroba He made no account of the interest on

rie made no account of the interest on his capital and the yearly diminution, hy feath and old age, in the value of his slave property—items which together with cost of transport, commission on sale, etc., I found to be obtained in a section of the contraction. be equivalent to 2\$600 per arroba

The cost of 7\$500, adding thereto the duty of 13 per cent., cost of bagging, shipping expenses, commission, freight, insurance and the unavoidable charges on the sale at a port of the United States, being estimated at the par of exchange here, involves a sale price of about 18 1/2 cents, to cover cost and

charges, without profit to the shipper.

Various causes have combined to increase the cost of growing coffee in this country, chief among them, however, being the fact that, from the exhaustion of the soll, the plantations have receded further and further from the coast; and the great increase in the

When I came to this country, in 1826, and for some years later, beautiful coffee planta-tions lined the harbor to its very shores in or seed, is consumed, as is also everything many places, and could be seen, in all direction to the consumer of provisions and tions, around the city. Now no important leather, if not carefully guarded in tin trunks,

plantation is found at a less distance than one hundred miles from this city.

Negroes were sold in 1826 for two to three undred milres, which are now worth two thousand milreis.

No.

Again, our defective currency system—the volume of the currency having, for many years, been greatly excessive-also tends mall degree, to maintain a false cost to our planters.

The estimates I have presented have espe

cial reference to the region more immediately tributary to Rio de Janeiro.

From the fact, that, owing to the greater exuberance of the soil, the yield per tree is much larger in the province of S. Panlo, than in the region previously referred to, it is very probable that coffee may be produced there somewhat more cheaply. Yours respectfully,

ROBT. CLINTON WRIGHT.

Rio. 28th, March, 1879.

PLAGUE OF RATS IN BRAZIL

From time to time in all parts of Brazil the plantations are subject to the depreda-tions of armies of rats that issue from the tions of armies of rats that issue from the forests and coissume everything edible that comes in their way. During a recent excursion in the province of Parand 1 found an almost universal lack of corn throughout the province due to such invasion of rats by which almost the entire crop of last year had been. destroyed. This invasion, or plague as it is called, is said to occur at intervals of about thirty years and to be simultaneous with The ng of the taquara, or hamboo, which ev erywhere abounds in the Brazilian forests. The popular explanation is that every cane of bamboo sprouls with a grub, the germ of a rat, within it, and that when the bamboo ripens and dies the germ becomes a fully de-veloped rat and comes out to prey on the plantations.

An educated and observant Englishman Mr. Herbert H: Mercer, who has resided a number of years in the province and had an opportunity of studying the phenomenon, kindly furnished me the following rational and curious explanation.

The bamboo arrives at maturity, flowers and seeds at intervals of several years which doubliess vary with the different species. The period for the species most abundant in Parana is thirty years. The process, instead of being simultaneous occupies about five years, a few of the canes going to seed the first year, an increased number the second, and so on progressively till finally the remaining and larger portion of the canes seed at the same time. Each cane bears about a neck of edible seed, resembling rice, which is very fat and in urishing and is often cate the Indians. The quantity produced is of mons and large areas are often govered to a depth of five or six inches. After seeding the cane dies, breaks off at the root and falls to The ground, the process of decay being hastened by the borings of larva which live larly abundant at seeding time. These larva have doubtless given rise to the story of The grub developing into a rat. New canes spring up from the seed but require seven or eight years to become fit for use and thirty to reach maturity. During this time, bamboo splints which are extensively used for mats, baskets, hampers for pack mules, etc., become an article of commerce from one part of the province to another and I met several troops loaded with them ascending from the litomi to the interior.

With this sudden and constantly increasing With this sudden and constantly increasing supply of nourishing food for a period of five years, the rats and mice, both of native and imported species, increase extraordinarily in numbers. The fecundity of these animals is well known and the result after four or five years of an unusual and constantly in easing supply of excellent food and in the absence of enemies of equal fecundity, can readily of enemes of equal redunding. All redunity be imagined. The last of the crop of seed being mature and fallen to the ground, the first rain causes it to decay in the space of a very few days. The mts suddenly deprived of food commence to inigrate, invading the plantations and houses and consuming everything that does not happen to be repugnant to the not very fastidious palate of a famishing rodent. If this happens at the time of corn rodent. It this happens at the time of cori-planting, the seed is consumed as fast as it can be put into the ground. Mr. Mercer, who plants annually about fifty acres of com, re-planted six times last year and finally gave ip In despair. The mandioca is dug up; the rice crop; if it happens to be newly sown or in seed, is consumed, as is also everything.

Mr. Mercer relates the following of one of these migrations which rivals the famous old stories of the wicked old bishop of the old stories of the wicked out ushop of the Rhine and of the Pied Piper of Hamelin, and shows a wonderful instinct. The forests of l'ibagy are separated from those of Castrio by front twelve to sixteer miles of open grassy campo in which there are no plantations and which produce absolutely nothing on which a rat can feed. Through this campo flows the river Tibagy, a switt torrent from 150 to 100 vards wide. The season at Castro is somewhat later than at Tibagy so that when the seed rotted at the latter place there was still an abundance of food at the former. Guided by some instinct an army of hundreds of thousands of rats set out from the forests of Tibagy for those of Castro, swimming the river and traversing the campo which to them must have been a perfect Sahara. Too fat to run, they could be killed with a stick with the greatest facility and the poorer people took advantage of this fact to provide themselves with fal for soapmaking. Thousands, anable to find a hid-ing place on the campos by day, died from exposure to the sun. A few weeks of scarcity sufficed to reduce the number to the normal quantity that can find food in the forests and this year the plantations have not suffered

If we suppose a region to be so sit that no new supplies of plants or animals reach it from without, except by some rare chance, as is the case with some natural history provinces, we can readily imagine a combination of simple and perfectly natural circumstances by which the ripening of the bamboo or any other food plant of long periods of fruiting, might bring about a profound modification in the flora and fauna of a region. Driven by hunger, the rats might entirely destroy the seed or roots of plants not usually subject to their depredations, and so exterminate the species. Or with certain circumstances of the character of the country and of the weather the whole mt Iribe might in their migrations become exterminated as a result of the very cause that had produced its extraordinary increase, or supposing the presence of some enemy of fecundity somewhat approaching that of the rat. this, with the increased food furnished by the latter, might become sufficiently numerous to entirely de-stroy the rat tribe when the supply of food ed and then in turn driven by hunger night attack and exterminate some other species which had hitherto, when its enemies vere less numerous, been able to sustain its Struggle for Existence,

ORVILLE A. DERBY.

In the list of mercantile navies of the world Great Britain stands at the head with a tonnage of 6,399,869, and the United States second with a tonnage of 4,538,183. gards the nature of the service in which their mërchant fleets are employed, there is a very wide difference. From the total tonnage accredited to her, Great Britain employs in her foreign trade a lonnage of 4,888,560— tonnage exceeding that of any other mercantile navy in the world-while the United States employs in this service only a tonnage of 1,553,705. The vast coasting and river trade of the United States will account for this proportional disparity, in a great measure.

COMMERCIAL

Rio de Jansiro, April 4th, 1879

Rie de Justire, April 4th. 1879

Steatliness has been the lenting feature in our import market during the period since our last issue of 231 tilline, he comes of exchange having cles of consumption, particultyr with respect to Manchester goods. Arrivals have been very limited to Manchester goods. Arrivals have been very limited wants only, in view of a higher exchange which for the company of the company of

Plotts. The inquiry has been quite of a retail character, and as stocks at sea me large to immediate and as stocks at sea me large to immediate meaning the property of the pr

Exports.

Export.

Cappe. The market ruled quiet for a few they after our last and dealers were becoming somewhat and the control of the demand for the bean, and a fair business has lately been dome at enhanced rates a separatorize to below. Sales have been 90, good bags, saying the control of the co

Good Firsts 7,500 @ 7,6s Low Good Firsts 7,200 Regulars 6,400 @ 6,700 Ordinary 5,000 @ 5,600,

Exchange for the past week finnefunied between 30 1/2 d, and 20 7/8 d. for bank paper and 20 1/3 d. for mercantile paper closing April 3.1, firm at 20 1/2 for the former and 20 1/3 for the former and 20 1/3 for the former and

SHIPPING NEWS.

ARRIVALS OF FOREIGN VESSELS.

NINC (SET), — Portials largery Brackpool; 20) tone; Argmont, marker; 37 thys; cargo, card mit code, to Norton, Megany & Co.
Battmore,—British bark Companers; 27 tone; Watter, master; 37 thys; flour and lard to Phings Bros & Co.

GENOA.—British stemmer, look Double extractions.

GENDA.—British stemmer Arch Bridd; 811 tons Carmichnel, communitr., 28 thrys; genoral cargo to Mannel Cresta & Co.

to annuel Cresta & Co.

MONTYPHED—Portagnose brigantine Timbre [15 tony; thomes, juncter] 16 days; cargo, jerked [15 tony; thomes, juncter] 16 days; cargo, jerked [16 tony] 17 tony [17 tony] 18 february 18 febr

n bourd. MARCH 23. SANTOS.—Belish steamer Tagus ; Gillies, com minder; 17 hours; passengers and cargo in Fran-

Livenpoot...—Norwegian brig Cula; 300 tons; Reinertsen, master; 58 days; general enego to J. & J. Pence.

A. 6.4 Feetice.

DOOTTO,—Portingueso bark Marqueitis; 303
tous silten Junior master; 35 days; cango, sine,
auli and smulries, to order.

CARRIPS—Brishish bark Fena; 301 tous; Dantel, master; 55 days; cargo, ratinust amplitus.

RICHAROND—German bark Janu Fon Meia;
51 lime; Kamuskanusiter; 39 days; cargo, flour,
to Phupje iros, & Cro.

ARRICHI S. 11 billion statement Merovall; 200
that yarroata—British stement, Merovall; 200
that yarroata—British stement, Merovall; 200
that yarroata—British stement, Merovall; 200
NOTION, Megany & Cro.

NOTION, Megany & Cro.

Manspallass, «German) bark Withelm Hone;

America, seeguw & Co.

Marischa, S.-deemun bark litheta Haack;
421 tons; Fretwentr, master; St days; general
enry to 14. A Dreytus.

Manschaes.—Swedish bark Acel; 359 tons;
Svenson, master; 85 days; general cargo to
surwen & Co.

CARDET,—British ship Saint James; 1,312 ions; Homond, master; 10 days; curgo, coal, to Wil-son Sons & Co. Limited.

Swansea.—British brigantine Topaz; 160 tons; flurris, master; 81 days; cargo, coal, to Harriwig, Williamson 4 Vo.

M.IRCH 25.

GENOA.—German steamer Hollen.collen; 1,900

Dus; Richard Sandor, commandler; 31 days;
passengers and general cargo to Brandes Kramer & Co.; brought 314 Italian and Austrian in,
migrants.

ungrants.

CARDIFF.—British burk Marg Frg. 981 to order.

Jensery.—British brigantine Raper; 137 tons;
Renord, master; 66 days; eurge, collish, to U.S.

Nicolou & C.

MARCH 27 MARCH 27. Livenpool.—British steamer Savalu; Massey, commander; 23 days, 3 days from Buhin; 33 first-class and 17! Ihird class passengers.

Reven Plate.—British steamer Bessel; 1,243 tons; Hubson, cummander; 5 1,2 days; passen-gers and general carge of Norton, Megaw & Co. Saxuos.—German steamer Interceise; 1,549 tans; you Holton, commander; 18 1,2 hours; pas-sengues and collec, in 1 musif, to Edw. Johnston s Co.

German steamer Gref Bismurck ; 1332 tons; Hagemann, communiter; 20 hmrs; pas-senger und coffee, in transit, to Brandes Kra-mer & Co.

mer Z Co.

German steamer Hermann; 1,600 lons;
Lamke, communder; 16 hours; parsesizers mod
coffee, in temail, in Brundes Kramer & Co.

London.—British bark Mairiel; 311 lons;
Tranks, master; 37 days; cargo, centent for the
Gabriellt waten works.

Tharani.—Swodish bark Amerenth; 279 tons; Nilssen, mister; 90 dnys; cargo, salt, to J. M. de Miranda Leone.

Bostox.—American hack Sketland; 883 tons; Hashell, master; 38 days; general cargo to Wright & Co.

Oporro.—Pertuguese bark Chotide; 311 tons; Pucheco, unster; 45 days; sall and general cargo to J. M. de Mirauda Leone.

to J. M. de Miraula Leone.
SETURAL—Norwegian bark Nicolay A. H.
Kandone 23 Hous, Peterson, masser; 32 days:
cargo, said, to order.
New Yones—American brigantine John Shermond; 42 tone; Mankin, master; 50 days; general
engo to A. C. Krilma & U.

nrgo to A. C MARCH 26

LONDON.—Swelish lugger Public; 234 tons; Hogstrom, master; 57 days; eargo, rice, to Ca-mara & Gomes.

CARDIES.—British brig Golden Plocer; 255 tons; Field, nuster; 90 days; cargo, roal, 16 Alex; Wagner.

Alex, Wagner. — French shanner Sarole; 1,738
Rivyn Plaxu. — French shanner Sarole; 1,738
tons; Ghirand, romanade; live days; passengers and targe, is, rivided hark Jacquer. 449 fourties of the shanner of the shan

MARCH 28.

NEW YORN and informediate ports.—American steamer City of Rio de Janeiro; Weir, comunander 22 Haya; 24/2 days from Bahia; passeugers, am general cargo to Wilson Sons & Co. Limited central cargo to Wilson Sons & Co. Laurence LONDON and intermediate ports.—Belgian teamor Horrox ; 1,101 tons; Mitchell, commund-der; 33 days, 312 days from Bahin; passengers and general cargo to Norlon, Megaw & Co.

Advantage of the season of the

in transit."

PENSACOLA.—British lugger desises: 200 lons;
Pearre, masler; 66 tluys; cargo pine lumber to
A. C. Nuthan & Co.
BRUNSWICK.—British brigantine Belle; 470 tons;
Barbaty, master; 55 days; cargo, pine lumber,
to Chaves, Pronseç & Co.

The same of the sa

MARCH 30.

HAMBURG and intermediale ports.— Germat steamer Scattes; 1.589 tms; Heydorn, com mamiler; 23 days, 3 1/2 from Ballia; passenger and general carge to Edw. Johnston & Co.

RIVER PLATE.— British steamer Nestoria; 1,718 tons; Ritchie, commander; passengers and general cargo, in transit, to Watson, Ritrihe & Co.

SOUTHAMPION and intermediate ports.— British steamer News; Brace, communiter; 20 1/2 days, 2 1/2 thys from Bahia; passengers and general enrgo.

generu eng.

APRIL t.

MASSPILES,—German bark Fides; \$20 tons;
Gallard, master; itt days; general cargo to
II. A. Dryths.

American bark Meadod; 543

BRUSSWICK.—American bark Mendota; 513 Whitlenunt, master: 59 days; cargo, pine lumber, to order. APRIL 3.

APRIL 3.
LIVERNOD, and intermediate ports—British steamer Language in team Schudeld, cummarhert 25 Jans, 2 days from Balint; passengava and general cargo to Xorton, Megaw & Co.
Xex Vosk and intermediate ports—British steamer Cussisi; ST tons; Britis, commander;
90 days, 4 days from Balint; general cargo to John Moore & Co.
BALTHOMS,—Auctivan burk Adelaide; 80 tons; Balint, nume et al. 12 days; earge, flunt, to limps due et al. 20.
Lipps due et

Putpps 9708, & Co. jussey via Porunubuco.—British brig Cana-tia 150 four; Carral, master; 59 days, 14 days from Pernauduco: cargo, codlish, to order.

BULYON AVELS,—Spanish brig Salendar; 165 tons; Hortn, master; 23 days; cargo, jerked beef, te José Romaguera

TUDE', - Spanish sloop Andaz; 231 tons, Frint, master; 24 days; cargo, jerked beef to Miranda, Ageredo & Co.

Minutia, Azevelo & Co.

FANNAS ISANO (Pacific).— French bark
Genty [562] tons: Buchine, mashev: 89 digys,
gaine, gaine, or multi fu Hamburg; culled a
signo, gaine, or multi fu Hamburg; culled a
signo, gaine, or multiple and signo function of La Be
Gaves, 555 Baltin.— British beigantline J. L. B;
di (rons); Roboson, musley: 63 days, 16 days,
Bullai cargo, codfish, to Johnston & Co.
Buxxon Avas —German brig Gusder; 184
tons; Kielleni, masler; 15 days; cargot, jurked
Bullai — German Stream the Charge 188
December 198
Decem

PAYSANDE, — German brigantine ** ** Ulara : 120 tons; Eifing, master : 20 days; cargo, jerked beef, to Sonza, frmão & Rotha.

PORTO ALTGRE.—Portuguese brigantine Rope; 186 tons; Sampado, master; 27 days; cargo, pro-visions, to José da Rocha e Sonza.

DEPARTURES OF FOREIGN TESSELS.

WIRCH sa.

MARCH 22.

Kng-Youx-Belgian steamer Jurbo Brahe;
1,388 tons; Meller, commander; carge, colbee,
HAVIG,—French brake Franciscopolite; 5:88 tons;
Blonet, master; gengral cargo.
Lasnos for orders—Bittish Duger Mary Front;
301 tons; Stusband, master; cargo, colbee,
HARLA—British bus Kandib; 298 tons; Mansfield, muster; general rargo.

M.IRCH 23. United-States.—American back H. W. Thow-nr; 641 tons; Drisko, master; stone in ballast. SEMINERO,—British brig Autogonist; 551 tons; Winter, muster; stone in ballast.

white, master; stone in ballast.

Aracery for orders.—Russian living Union; 402
tons; Ranistron, master; general enryo.

De partures for foreign portes su el last report,

M.1RCH 24 SOUTHAMPTON and intermediate ports.—Brit-ish stemmer Tagas; 1,923 tons; Guilles, com-mander; 116 passengers.

M.1RCH 25. BALLIMAND.—American back Juncton; 223 tons; Myrick, master; cargo coffee, SANTY Hoos.—Builsh ship Robert L. Lanc; 4,153 tons; Young, master.

AAARCH 26. CLARA!.—American brigantine Bogolá; 298 tons: ohnson, master: general cargo.

MARCH 27.

MARSHALSS and intermediate ports—French stemoer Naries 1, 1298 stemer Guirand, commander; pussatiges, collect and general cargo.

BARRATHES—American Information Rocket Res; 406 tons; Hinging more Inchales!

Tabasco.—Swedish bark Jupite; 45) tons; Hedberg, master; score in ballast.

Hechberg, master; some in ballast.

M. RCU 28.

Lavragesat, and intermediate poets—British
Lavragesat, and intermediate poets—British
stemmer Lawrick (1.28) may thousan communice
passengers, collect and general energy.

CALLAD and intermediate ports.—British
stemmer South; Massey, communice; presengers and care on in transit.

PENSACCIA.—Argentine bark. Lawle Marie; 529
tans; (Divier, master; stone in ballast.

GASPy.—Billish brite Commonlar; 157 tons.
Remort, master; in ballast.

M.I.RCI/ 20.

MARCH 29.
BRENEN and intermediate porta-German strainer Golf Biomerik; 1570 (10):5 Hageman, commander; passesurers and general carao.
SANTOS-Brillish deamer Gossonii; 72; 1005; Armstong, commander; securit ou ro.
HAMPION ROADS-American bark, Neophor; 12 (10):5 (10); runsive; 3 (20) on in ballast, PENSACOLS-PENDA bark Rice New; 30 (10); Pierre, marker; 40 (10); Pierre, parker; 40 (10); Pierre,

Lisbon.— Dunish brigantine C. C. Hosnang; 199 Jons; Andersen, master; cargo coffoe.

Markett 39. Hubbard and intermediate ports,—German stemar Fulparairo : 2,330 tous; von Halten, commander; passengers and general care. HARE—Thereb stemare San Martin; 1,405 tous; Guegan, commander; passengers and general cargo.

nral cargo.

LAPERPOOL and intermediate ports.—Beitish steamer lapparaise; Hamilton, commander; passengers and general cargo.

prevengers and general cargo.

New York.— German steamer Hermonn;
Lamke, commander; cargo, collec.

SANOS.—Herman steamer Aich Druid; 825
fms: Carmichael, commander; cargo cement.

St. Though.

St. Thomas.—Norwegian brigantiae Pac 397 Jons; Grunwen, misser; cargo, coffice.

NORTHERN PORTS - Viench bark Alexandra; 235 tons; Sion, master: some in bullast.

25 (1985) Some more consistent of the American bugger A. Heaton; 485) tous; Rogers, master; cargo, codice.
Sult Javay. Portugues ship Nova Goa; 74 (1985) Oliveira, master; general cargo.

APRIL 1. SANTOS.—British steamer Nevo; Bruce, com-nander; pessengers and cargo in transit. Gun alter,... British brig Crickieth Costle; 221 onts: Morris, master; cargo, coffee.

tons; Morris, master; cargo, coffee.
WEST INSUES.—British lugger Janes Wilson;
334 tons; Dayke, master; stone in ballast.
RESO GRANDE.—Portuguese sloop Noro S. LonRESO : IN COURS; France, master; cargo coal.

BRAZILIAN FINANCE

In the present unfortunate financial condition of Brazil, every intelligent discussion of causes and remedies must necessarily command a careful and widespread consideration. Whaterer may be the conclusions and theoties of the financiers and legislators of the goreinment, and they are without number, it is evident that the carefully-considered opinions of husiness men, whose pursuits have made them thoroughly familiar with this and kindred subjects, must be entitled to more than passing notice. In an article recently published in the Anglo-Brazilian Times, Mr. Robert C. Wright, one of the oldest and best known merchants of this city enters into a very candid and thorough disenssion of the excessive issue of paper money in Brazil, and of its effects upon the credit and prosperity of the country. The follow-ing is an abstract of the article which our space does not permit us to republish entire:

space does not permit us to repunish entire. In maintaining the standard of value or un testoring it if temporarily disturbed, lies the whole duty of government in connection with the currency of a country. With the Innition Buctuations of Exchange the government should have no concert, as they shaply indicate the varying relations of the "halance of payments." in the foreign connarter of a country. These fluctuation's are the traile harometers of the metchant and statement and should be left as few as the chib and flow of the tide. The standard of rather in this country being a legal aliantion of the orders of gold at 45500 which is

as the cith and flow of the thie.

The shandard of rahin in this country heing a legal rahination of the orders of gold at 45000 which is equivalent to 185 pence of British shandard gold, the part of exchange between the rail and Great British is 7 pence per unlives. Exchange between these two countries more standard and the rail of the pence of some 25 % below par, thus establishing the first of a great depreciation in the standard of ratine.

Paper money never has been and never can be capital. It is sharply the representative of capital and is only useful so long as the sum of its value in circulation corresponds in this evalue of the metal which it displaces. Some wilers, forgetting that principles have neither latitude nor longitude, have mautained that Brazil, being a young and vigous country and fall of resources, could riolate nith impulying the rules of sonal concursy; that the country might be flooded with an unfinited amount of paper circulation to her great adrastage. They ought now to think otherwise and to see that the capital which Rail wants, can not be obtained from a paper currency.

One of the work feetures of an excessive currency.

ought now to time source seems or explaint which brail wants, can not be obtained from a paper currency. One of the worst features of an excessive currency, learning a reasonable guarantee of future reclemption, is that it maintains a false and phenomenal relation to gold thus inducing exaggerated gold priers of the nordness of a country and wilmined prejutiding the induces of producers through the competition which at is state to proache. Our planters are tealing the artist of the produces of the produces at which they an nor compelled to self their products which is, in part, that to the foreign competition occasioned by the high prices long prerailing in Bazilt. This illegithmete cangguration of prices applies as well to imported merchandise as to the products of the country, and, as consequence, has a tendency to repress the export tritic encouraging the import trade, and thus trade relations of the country.

In 1850, according to the abic reply of Mr. J. C. Slorytok, to the circular of the Minister of Finance, the currency of Bazil consisted of c. (Occomment paper.

I'stimuted gold, silver and copper. 5,000,000\$

As exchange on London was then 28 38 potter, about five per centum above par, it may be assumed that there was a deficienty in the circulating metum. It is our opinion that this premium was due to a factorable balance of trade and not to a deficient circulation, but admitting the latter the addition of five per centum to the existing currency mould give us only about 55,000,0005.

Taking the increase of population in the United States, about 33 1/3 per cent, per decade, as a basis for estimating the increased wants of Brazil we find that the country requires to-day a currency of about 125,000,0005. The actual circulation of government and bank paper, thorever, is some 200,000,0005. This

52,000,000

that the county,
and bank paper, horever, is some 208,000,0008. This
and bank paper, horever, is some 208,000,0008. This
represents a phenomena ratue of about 156,000,0008
gold, while, upon the bases of legitimate prices, it
should not excel 123,000,0008. This learnes an exshould not exceed 123,000,0008. This learnes an exfice 000,0008 in our present circulation, which, should be existed and the standard of value to a norm hasis, should be will idrat u.

It is possible that the withdrawal of a much le-It is possible that the withiraxval of a much less amount than \$0,000,000,f=95,500,000,000—might raise exchange to par, but such a rate esphilished under such circumstances, rould not be legitimate, and any powerfully distutting cause might send it down again five or less per centum; which the withtrawal of he whole \$0,000,000 would establish the past of exchange on a legitimate basis tribre it would be maintained by the currency uccessities of the country and where it nould be subject only to such fluctuations as might occur with a purely metali

The withdrawal of this excess in the citalating medium becomes, then, an imperative obligation anount the government and the manner by which it shall be done is of vital importance. The government was and administers the 10 nn Petilo 11 rail-ond, estimated to be north 150,000,00004; and it is claumed by some of let leading state-same that she railed to disappropriate the me train's properly of monastic orders which is of enormous take. In could be wise policy, therefore, to apply a portion of tivese enormous resources to the falfillment of this injectific obligation commanded as it is no less to a policy policy. Such a common loosely than by somal policy. Such a succession of rollers by which, they are dried hardward policined.

tence and would not only arrest the flight of foreign capital from this country but would most probably turn its current again this way. If there be national or other susreptibilities involved in the sale of the Dom Pedro II road then it, either alone or in cou-

Dom Pedro II road then it, either alone or in con-junction tribl the mortmain properties, might serve as a basis for the issue of debentures: through which the same purpose could hencomplished as by a safe. No attempt should be made to bolster up ex-change by any of those derices which have so sig-sually failed it interes past. Both here and almosal, when resorted to, they have overstimulated trade, encounaged speculation, and resulted in dissafer. Temporary expedients and pullatires are not the remedy for this disease; it demands heroic treat-ment

REPORT OF THE BUDGET COMMITTEE. The report of the Committee of the Budge), composed of the disputites Burrane do Macedo, Cezar Zana, Prado Fimentel, Pabio Reis, Vifasia to the Medicine and Sonza Carvailho, was presented to the Chamber of Depulies, March 29, and notheral to be patied.
From it we extract the fullowing summary of the funeric Impulsion of the Empire and the means proposed by the gavernment 40 meet the delist.

Front we extract the inflowing summary in the flanniar longithon of the Empire and the means proposed by the current to meet the detect.

The revenue for the financial year 1850-1880, is estimated, or the basis of the revenue of the three succeeding years, at 10,000,000,000.

The appropriations proposed by the Budget including both of 10,000,000,000.

The autocipation leaves the break of the Manager of the three second size of the Manager of the Manage

almost to \$500,0008000 of which 1,500,0008000 crill probably sup to expentish in the surceeding tieral year.

In discussing the means to be adopted for restoring the bulance between receipts and expenditures, the committee is of the upinion that no further reductions ran be made without serious diturns, the consultate is of the upinion that no further reductions ran be made without serious probability of the probability of the probability of the surface of a shield to made take any streeping financial expenditures, that it urould be mustle in the face of a shield to made take any streeping financial expenditures, that a loan is the present ricenustances round only further reduces the shift intervinent and the expense of the financial transition of the train the financial transition of the train the financial and the surface of the public many, the present unfarous ble conditions, which it is hoped are only transitiony, shall have passed.

The case has been also that the financial control of the public many is the shall with spatial and simplify the shally milest than increase the response previous of the train with spatial and simplify the shally milest than increase the response probability of the public many shall have proposed previous of the train with spatial and simplify the shally milest than increase the response probability of the shall the probability of the shall be unitarity of

anothed or substituted by an auxiliarity in a combined or substituted by an auxiliarity in a combined and the clock has be reshed; but the step into State of the combined and the reshed and the reshed

COFFEE CROP OF 1879
Concerning the approaching harvest of coffee a recent letter from the interior says:
All probabilities of an average crop this year are lost. It seems to us that in-tile valley of the Paralyla the coffee crop of 1879 will scarcely be a third of that of the proceeding year.
Various causes have led to this result. The decay, of the planntaines in some localities from age, for other points, disease of the roots and leaves, and it general the utter lack of feliot toward a more mechodic and scientific entilivation.
In the districts of Rezentle, Bura-Manse, Pirahy, Vassoniras, Valença, Mar de Heyaniha, etc., there is a tendlency to a progressive inhimitation of the coffee harvests until nuter extinction. We except in these districts those zones in which the forests have been destroyed in a lesser degree and in which some of the plantaions are still nece.

In nouthern Minas the cultivation of coffee is in a distance.

cen destroyed in a resser degree and in vincus once the plantations are still new. In northern Mines the cultivation of coffee is in a criod of development not withstanding that it has becontentl with a lack of lahorers. The storms have, theorems will a make of maneless, the sortions and con-finit, but some plantations will give, far the first time, a good harrest in 1879.

ces from São Paulo seem to indicate that the op will be a third less than the regular harvest, seems to us therefore that we shall not be far wrong Itseems to us unelectore that the small not betar viting in slating that hi general the coffee gathered utill equal a shalf of the crop of 1878. As however there still exists a portion of that crop in deposit the exportation of coffee will be regular during the whole of the current year to fail entitely in January of 1880.

1880.

Nothing can be said regarding the quality of the coffee of the approaching barwest, but as the planta tions are in general new it is probable that the me thinn and first qualities will abound.

THE ROACH SUBSIDY BILL.

The following is the full lext of the Brazil-ian mail steamship subsidy clause in the Postoffice appropriation bill, as it passed the United States Senate, February 21. When the bill came up in the House of Representatives on February 28, the subsidy clause was stricken out by a vote of yeas 89, nays 157.

For ocean steamship service between the United States and Enzil, \$200,000; and the Postmaster States and anail, \$200,000; and the Posts General is authorized and directed, after the adrettisement, to contract for a time not ex ten years for earrying the mails once each month commencing not later than July, 1879, from New York by tray of Norfolk, Va., to Rio de Janeiro und once each month, commercing not later that March, 1880, from New Orleans, by way of Galres ion, Texas, to Rio de Janeiro and return, includ March, 1880, from New Orleans, by way of Galteston, Texas, to Rio de Janeiro and return, including appropriate latermediate ports, with the lowest
biders, being responsible owners, giring ample seeurity of first-class American built and orned from
serve steam-bigs of not less than three thousaud
tons, after the best modelen models, and capable of
making thirteen unatical miles an hour; such mailcarriage to be paid for at not exceeding \$50 per
natical mile per annum, one very, for the distance
actually traversed between the termini of each of
said routes; provided however that the annual compensation for such potal service shall not exceed
the sum of one insulved and fifty thousand dollars
for each of said lines, the two lines to be contracted
for afaultaneously, and neither contract to go into
effect unless doots services shall be contracted
for and established recording to the provisions of this
entire the service of the provisions of this
entire the contract to be considered in force if the
service on either line be abandoned or iliscontinues;
and the contract therefor to contain all provisions
for scenting efficient service rhich may be customany or required by larr in such cases.

It seems that opposition to Chinese immigration

any or required by laar in such cases.

It seems that, opposition to Uninese immigration is not wholly confined to the Pacific slope of the United States. At Melbourne, Australia, rhere the Celestials have gone into the retail trade and are contining to sell ten at a boree price than the Cases and groces, a strong anti-Chinese feeling has sprang ap. The retailers are loudly demanding that their interests shall be protected. It is thought probable that Queensland, New South Wales and Victoria will ultimately enter upon a convention to finally exclude all Chinese immigrants. It is a high compliment to the industry and third of these people, though not intended as such, to admit that restrictions and the protection of the pro

exclude all Climses inmigrants. It is a high complinant to the industry and thrill of these people, though not intended as such, to admit that restriction or exclusion is the only may of competing mithing in histories pursuits.

The annual tice crop of North Carolina, South Carolina and Louisiana, U. S., avenages 80,000,000 pounds. The Carolina rice brings one-halfa cent a pound more in market than the Louisiana rice, though, it is said, there is scarcely an appreciable difference between them. A barrel of rough rice—165 pounds—finds a really market in New Orleans from \$3,50 to \$5.00, and the cost of getting it cleaned in the will: is about one cent a pound. In Carolina and the cost of certain the cost of getting it cleaned in the will: is about one cent a pound. In Louisiana, from 2 to 30 to \$4.00, and the cost of getting it cleaned in the will: is about one cent a pound. In 1876, the cost of getting it cleaned in the will: is about one cent a pound. In 1876, the cost of getting it cleaned in the will: is about one cent a pound. In 1876, the cost of getting it cleaned in the will is about one cent a pound. In 1876, the cost of getting it cleaned in the will in 1876, the cost of getting it cleaned in the will in 1876, the cost of getting it cleaned in 1876, the cost of getting it will be getting it in 1876, the cost of getting it is a cost of getting it is a getting it in 1876, the cost of getting it is a getting it is a getting it in 1876, and it is a getting it is a like in 1876, and it is a getting it in 1876, and it is a getting it is a getting it is a getting it is a getting

North and South America, and also on other coasts. It is in the shape of a worm, but has a head of hard shell imade to resemble an auger, gouge and file in combination. In cutters timber in almost insect form and quickly grouns to a length of fourteen or more inches. In lives on the timber and honey combst it brengloot, destroying vast amounts of property yearly. The only thing that preserves timber against the statekes of this animal is an astract of coal tar or gas tar in which there is a large per ceptum of capbelle acid,

COMMERCIAL BANK

RIO DE JANEIRO.

	12,000,0005000
Subscribed	11,264,000\$000
Paid up	3,932,000 000
中断生产 200	4 12
Reserve fund Rs.	507,813\$546.
Nest profits not divided "	800,154,9641
1.00	1,307,968\$487
This Bank draws on	,*
he London & County Pank	London
he Bank of Portugal, payable in Lish Lendon.	Lisbon
he Dweet Houle of Destugat conclude	

ONOVO MUNDO

A Monthly Illustrated Journal of Politics

REVISTA ANDUSTRIAL A Monthly Illustrated Journal
of Commerce, Agriculture, Mining, Railreading, and

PUBLISHED IN NEW-YORK, IN PORTUGUESE And having their Circulation wholly in Brazil, EDITED BY J. C. RODRIGUES, LL. B. AGENCY IN BRAZIL N. 47, Rua 1" de Margo

DR. L. R. EBERT AMERICAN DENTIST

IMPERIAL FAMILY OF BRAZIL

and
Alimisters of Foreign Legath
198 Run do Ouviday
Rio De Janeiro

tness, promptness and streness in all opera

SIRUP OF PHOSPHATE IRON,

QUININE AND STRYCHNINE (DR. EASTON'S FORMULA)

SALVADOR DE ALMEIDA

18 RUA EVARISTO DA VEIGA,

DR. ANDREW J. INGLIS AMERICAN DENTIST

May be found in his office, Rua do Ouvidor, No. 48, from 1 m. until 4 p. m. Established upwards of twenty years in thi

ORWICH UNION FIRE

INSURANCE ASSOCIATION
(Established 1997)
Accepts Fire Insurance of all descriptions at moderate asserts for 100 DE JANESTS FOR 100 DE JANESTS AND BANTON MEE, ALLEN & CO.

The Control of rission Merchants No. 66 Rua do General Camara Rio de Janeiro.

HELIOTYPE

nanent Photographic Book Illustrations

THE HELIOTYPE PRINTING COMPANY are incres of Book Illustrations by the Heliotype, Photo-til hie; and Photo-engatving processes, Employed by the b phis, and Ploto-eighthing pocesses. Danhard Williams to this in the Ploto eighthing pocesses. Danhard Medicipper, Photo-this States Government in illustrating Scentific and Medicippts, by Scientific, Historical, and other learned societie the leading publishers; and for illustrating Tuwn and Fe Historica, ttae, etc. He horses a constant of the co

OFFICE OF "O NOVO MUNDO No. 47 Rua 19 de Março Rio de Janeiro.

NEW-YORK AND BRAZIL EXPRESS

c. : in New-York, No. 30, Burling Slip. : in Rio de Janeiro, No. 47, Rua 19 de Março. Office in New-York Office in Rio de Jan

TRUBNER & CO.

and Orientat Literary

English BANK

RIO DE JANEIRO, LIMITED

HEAD OFFICE IN LONDON BRANCHES

RIO DE JANEIRO, PERNAMBUCO AND SANTOS

Draws on the London Joint Stock Bank and travery description of Banking business.

W. R. CASSELS & Co.

Commission Merchants.

American stoves and kitchen ware a specialty.

ELETCHER AND KIDDER'S BRAZIL AND THE BRAZILIANS"

The minth cities of his well-known work, revised and entarget, has just been isseed under the personal supervision of Rev. J. C. Fietcher. Considerable new material foclatifully, the new little of the control of the

E. & H. LAEMMERT

WHEELWRIGHT, FULLER

Foreign Commission Merchants.

84 & 86 RRADE STRE

New York.

PALM & ALLEN,

SHIP-CHANDLERS

5-Rua Fresca 5

BALDWIN LOCOMOTIVE WORKS,

PHILADELPHIA, PENN.

(Established, 184)

BURNHAM, FARRY, WILLIAMS & CO.,
Proprietors,

These locomolive engines are adapted to every variety of ser-vice, and are built accurately to standard gauges and templates. Like parts of different engines of same class perfectly inter-changeable.

All work theroughly esamuteed Agent for Brasil, O. C. JAMES,

WHITNEY & SONS,

CAR WHEEL WORKS

Chilled cast iron wheels (steeled by the Hamilton process) for Railways, street cars, and munes. Axles of iron or steel.

HOPKINS, BROWETT & CAUSER,

General Hardware Merchants. BIRMINGHAM, ENGLAND.

S. G. & G. C. WARD;

BARING BROTHERS & COMPANY.

52 Wall St., New York. 28 State St., Boston. IDGERWOOD M'F'G. Co., (LIMITED)

MILFORD & LIDGERWOOD,

SINGER SEWING MACHINE,

COFFEE-CLEANING MACHINERY.
No. 95, Rua do Ouvillor.

DULLEY & MILLER, IMPORTERS & COMMISSION

MERCHANTS. SANTOS and São PAULO:

THE "ALDINA" BOOK AND JOB PRINTING OFFICE.

No. 81, Rna Sete de Setembro.

All kinds of Book, Newspaper and Job Printing carefully and authority special facilities for Langlah Printing. Execut facilities for Langlah Printing.

The office is fully equipped with new preses and type of a support of work. The careful and styles of work.

"The Rio News" and the "Impress Evengelon" are raised at this office. ::

T. DWINAL,

Agent for the

"DOMESTIC" and

* GROVER & BAKER N. B.—Every article pertaining to Sewing Machines and terr use constantly on hand.

UNITED STATES AND BRAZIL S. S. LINE.

Carrying the United States and Bran

orms a regular monthly service between New York and to Janeiro, stopping at the intermediate ports of St. as, Pará, Pernambueo and Italia. The steamers of this 5,500 tons measurement cock, ore new and first-class in

Steamers will arrive and clear at this port as follows: ander Arrive De en New York and Rio de Iz

WILSON'S SONS & Co.